P21938.A04

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants :	Harald MARTIN et al.	)	
		)	Group Art Unit : Not Known
Appln. No. :	10/030,177	)	
	(National Stage of	)	
	PCT/DE00/02659)	)	Examiner : Not Known
I.A. Filed :	August 2, 2000	)	
		)	

For : METHOD AND DEVICE FOR REMOVING RECOVERABLE WASTE PRODUCTS AND NON-RECOVERABLE WASTE PRODUCTS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

Further to the filing of the Information Disclosure Statement and pursuant to 37 C.F.R. 1.56 and 37 C.F.R. 1.97-1.98, Applicant hereby directs the Examiner's attention to the following additional information.

WO 94/18287

DE 196 12 037 A1

DE 42 26 632 C1

DE 42 35 412 A1 and its family member U.S. Patent No. 5,425,317

DE 197 14 593 A1

DE 42 30 311 C1

DE 28 16 282 A1

EP 0 609 802 A1

Applicant further directs the Examiner's attention to WO 01/08823 which is the publication of International Application No. PCT/DE00/02658 of which U.S. Application No. 10/030,178 is the U.S. National Stage Application.

Applicant also notes that that International Preliminary Examination Report for Internatioanl Application No. PCT/DE00/02659 indicates the following regarding the claims and prior art:

Section III
Report on novelty, inventive activity and usefulness not to be issued.

1. Dependent claim 26 contains a feature (blade-like device) that is not mentioned in the specification. It is therefore not supported by the specification, as prescribed by Article 6 PCT. Due to the existing uncertainty regarding the interpretation of the claim text, the claim cannot be examined.

Section V
Substantiated determination of novelty, inventive activity and usefulness according to Article 35(2); documents and explanations to support this determination.

2. Reference is made to the following documents:

D1: US-A-4 412 889
D2: DE-A-25 46 801
D3: WO-A-99 04197
D4: US-A-4 123 332
D5: EP-A-0 426 925
D6: EP-A-0 280 364

3. The subject of claim 1 of the current application, in so far as this claim can be understood (see Section VIII), is a process for removing recoverable waste products and non-recoverable waste products characterized by the following features:

- Feeding the material into a horizontally fixed container
- Transporting the material to the other side of the container
- Input of energy into the container, whereby 60-80% of the energy input takes place in the first quarter of the container on the side of the material feed. In light of the

specification (p. 10, para 2) the term energy input covers both the addition of heated air and the partial combustion of the material.

- Removing the entire reaction product (exhaust gas and solids) from the container.
- Conducting further following processes, in which the internal energy of the exhaust gases and the solids changes.

Document D2 should be considered the closest prior art regarding the subject of claim 1. A device is disclosed (claim 1, Figs. 1, 2) for the thermal treatment of granular or lumpy materials. These materials are fed into a horizontally fixed container and transported to the other side by means of a conveyer screw. In the entrance area of the container energy is transferred directly to the material by means of a burner. Furthermore, combustion air is fed in through openings in the transport shaft, whereby the air supply can be regulated zone by zone (page 8, line 24; page 9, line 4; page 10, lines 15-18). All the solid and gaseous reaction products are removed in the exit area, the sensible heat contained in the hot gases can then be used by means of heat transfer (page 10, lines 6-9). D2 thus discloses all the features of claim 1 with the exception of the quantitative distribution of the energy input, which is to amount to between 60-80% of the total energy input in the first quarter of the container.

The technical object can be seen as finding the specified quantitative distribution of the energy input. However, this feature is not an inventive parameter selection, it would be determined by one skilled in the art in the course of routine work without inventive activity, particularly since the technical effect of the regulable thermal decomposition (cf. specification, page 7, para. 2) has already been suggested in D2.

The solution proposed in claim 1 is therefore not inventive as defined by Article 33(3) PCT.

4. Claims 2-14 do not seem to contain any further features that are not known from the prior art cited by the applicant or in the international search report (documents D1-D5) or obvious to one skilled in the art, particularly since no surprising technical effects are described. Their subject matter cannot therefore be considered inventive (Article 33(3) PCT).

5. Each of the documents D1, D3-D6 can be regarded as the closest prior art regarding the subject matter of claim 15, in so far as this claim can be understood (see Section VIII). In each of these documents tubular containers are disclosed that feature at least one entrance opening, at least one discharge opening, as well as a shaft extending through the middle of the container. All of these devices are suitable for removing waste material. These documents do not disclose devices for the cracking and gasification of the reaction products. However, these devices are known in prior art, which was recognized by the applicant in the specification. The application does not reveal any technical effect resulting from the combination of these per se known processes that is not obvious. In the claimed combination every process evidently functions in a manner known per se. This is therefore an obvious and not an inventive combination of features.

6. The features of claims 16-25, 27-32 are either known from the documents D1-D6 and would be combined by one skilled in the art, or they represent known equivalents. No feature can be identified on the basis of which an inventive activity could be acknowledged.

Thus none of claims 15-25, 27-32 meets the requirements of Article 33(3) PCT.

Section VI
Certain cited documents

7. The following document was not taken into consideration in the preliminary international examination, but should be considered relevant in the examination as to novelty according to article 54(3) EPÜ.

Patent no.	Date of publication D/M/Y	Filing date D/M/Y	Priority date D/M/Y
WO 00/17288	30/03/2000	11.09.1999	23.09.1998

Section VIII
Remarks on the International Application

8. Claim 1 is not clear, since it contains terms that are not defined or are contradictory.

The term "essentially horizontal container" is unclear, since the geometry of the container is completely undefined. The term "horizontal" would only be meaningful in the context of the container geometry. For the same reason the following terms are also unclear: "side of the inflow of the material," "areas of the container," "other side of the container," "other areas of the container." The broadest possible interpretation of the term container was assumed for the purposes of the examination as to novelty and inventive activity.

The term "continuously and discontinuously" creates an inconsistency, since it is unclear how the transport of the reaction mass should be carried out continuously and discontinuously at the same time. For the purposes of this Office Action, this feature was not considered.

The text of the claim does not indicate which physical or chemical process is to be carried out in the container, it can merely be discerned that exhaust gases and solids result. For the purposes of the examination a correspondingly broad interpretation was chosen and merely assumed that a change takes place in the composition of the products used.

The term "energy recovery" was likewise interpreted in its broadest possible meaning. This covers all the processes in which the internal energy of exhaust gases and solids changes.

9. The specification as a whole indicates that the following features are essential for the definition of the invention:
(1) Separation of the materials used "recoverable waste products and non-recoverable waste products"
(2) Selection of the crushed products used
(3) Preheating and/or drying
(4) Carrying out at least one chemical reaction in the container
(5) Feeding oxygen or air into the container
(6) Cracking or gasification of the reaction products.

Since independent claim 1 does not contain these features, it does not meet the requirement of Article 6 PCT in connection with rule 6.3 b) PCT, that each independent claim must contain all the technical features that are essential for the definition of the invention.

10. Independent claim 15 is not clear, since it contains terms that are not adequately defined. The term "side" permits several interpretations with regard to the feature "tubular." It is therefore not clear from the formulation "on one side" or "on the other side" how the feed and discharge openings are to be arranged with respect to each other in order be covered by the scope of claim 15. For the purposes of this Office Action the broadest possible interpretation was used, in which the feed and discharge openings need only to be separate from one another.

Furthermore, the formulation "a shaft ... on which devices are located" is vague, since neither features nor function of the specified devices are described. This feature was not considered for the purposes of this Office Action.

11. The features of claims 2-5, 16 are not mentioned in the specification. These claims are therefore not supported by the specification, as prescribed by Article 6 PCT.

Copies of the above-noted documents are enclosed together with a duly completed Form PTO-1449. It is noted that the Form PTO-1449, with the exception of the U.S. application, references each of the cited documents. The U.S. application is not listed as it is not a publication. Moreover, the Examiner is invited to review the file of the cited U.S. Patent Application at the Patent and Trademark Office.

The Examiner is requested to consider each of these documents, and to make them of record in this application by initialing in the appropriate spaces on the Form PTO-1449. Applicant

respectfully requests that the Examiner include a copy of the initialed Form PTO-1449 with the next communication from the U.S. Patent and Trademark Office.

This Information Disclosure Statement is being filed prior to mailing of a first Office Action on the merits. Accordingly, no fee should be necessary for its consideration. However, if any fees are deemed to be necessary for consideration of this disclosure statement, the Commissioner is authorized to charge any necessary fee to Deposit Account No. 19-0089.

Should the Examiner have any questions or comments regarding this matter, the undersigned may be contacted at the below-listed telephone number.

Respectfully submitted,
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Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. P21938	Serial No. 10/030,177
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	Applicant Harald MARTIN et al.	
	I.A.Filing Date August 2, 2000	Group Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5 4 2 5 3 1 7	06/20/95	SCHAUB et al.			
	4 4 1 2 8 8 9	11/01/83	OECK			
	4 1 2 3 3 3 2	10/31/78	ROTTER			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
	9 4 / 1 8 2 8 7	08/18/94	W.I.P.O.				
	1 9 6 1 2 0 3 7	10/02/97	GERMANY				
	4 2 2 6 6 3 2	07/22/93	GERMANY				
	4 2 3 5 4 1 2	04/28/94	GERMANY				
	1 9 7 1 4 5 9 3	10/15/98	GERMANY				
	4 2 3 0 3 1 1	12/09/93	GERMANY				
	2 8 1 6 2 8 2	10/18/79	GERMANY				
	0 6 0 9 8 0 2	08/10/94	E.P.O.				
	2 5 4 6 8 0 1	04/21/77	GERMANY				
	9 9 / 0 4 1 9 7	01/28/99	W.I.P.O.				
	0 4 2 6 9 2 5	05/15/91	E.P.O.				
	0 2 8 0 3 6 4	08/31/88	E.P.O.				
	0 0 / 1 7 2 8 8	03/30/00	W.I.P.O.				
	0 1 / 0 8 8 2 3	02/08/01	W.I.P.O.				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.